

January 2015 Climate Review for Puerto Rico and the U.S. Virgin Islands

...Based on data received until Jan 31st ...

SAN JUAN



Synopsis

A generally fair and mainly stable weather pattern prevailed across the local islands most of the month of January. However, showers and even isolated thunderstorms were noted from time to time across the east and north coastal areas as well as western Puerto Rico. This activity were associated with troughiness moving across the area combined with patches of low level moisture. Nevertheless, significant rainfall accumulations in a short period of time were not detected. An average rainfall total of 3.45 inches was measured across mainland PR, which is 1.36 inches below normal.

In terms of temperature, the islandwide mean temperature was 74.5°F which is approximately 1.1 °F warmer than the 30-year average. In fact January 2015 ended as the 8th warmest January islandwide. The highest maximum temperature recorded this month was 91°F at Rio Piedras Substation on January 28th , and the lowest minimum temperature was 52°F on January 26th at Toro Negro Forest and January 7th at Adjuntas Substation.

Statistically, the average maximum temperature at the Luis Muñoz Marín International Airport (TJSJ) in San Juan was approximately 1.3°F warmer than the 30-year. The average temperature was below normal for 3% of the month; while above normal temperatures were observed 74% of the month. The average minimum temperature at TJSJ was 73.3 °F, which is 1.3°F above normal in respect to the 30 year average. Not surprisingly, January 2015 ended as the 3rd warmest January on record at TJSJ.

Across the U.S. Virgin Islands, the mean temperature at Henry E. Rohlsen Airport (TISX) in Saint Croix and Cyril King Airport (TIST) in Saint Thomas was 78.3 and 78.2°F, which is 0.1 above normal and 0.6°F below normal respectively. In terms of precipitation, a rainfall total of 4.96 inches was reported at TJSJ, which is 1.20 inches above normal. January 2015 produced 19 days of measurable rain at TJSJ, which means 61% of days where 0.01 inch or more accumulated. Meanwhile, 13 and 17 days of measurable rain were reported at TIST and TISX, resulting in 42 and 55% of the days where 0.01 inch or more accumulated.





Data retrieved from AHPS, CoCoRaHS, COOP stations and primary climatological data sites

RAINFALL

Islandwide climate record period: 1940 to 2015

San Juan Metro Area climate record period: 1898 to 2015 (Primary climatological site)

Cyril E. King Airport/St Thomas climate record period: 1953 to 2015 (Primary climatological site)

Henry E. Rohlsen Airport/St Croix climate record period: 1951 to 2015 (Primary climatological site)

Following WMO criteria: annual data - Less than 10% of missing values

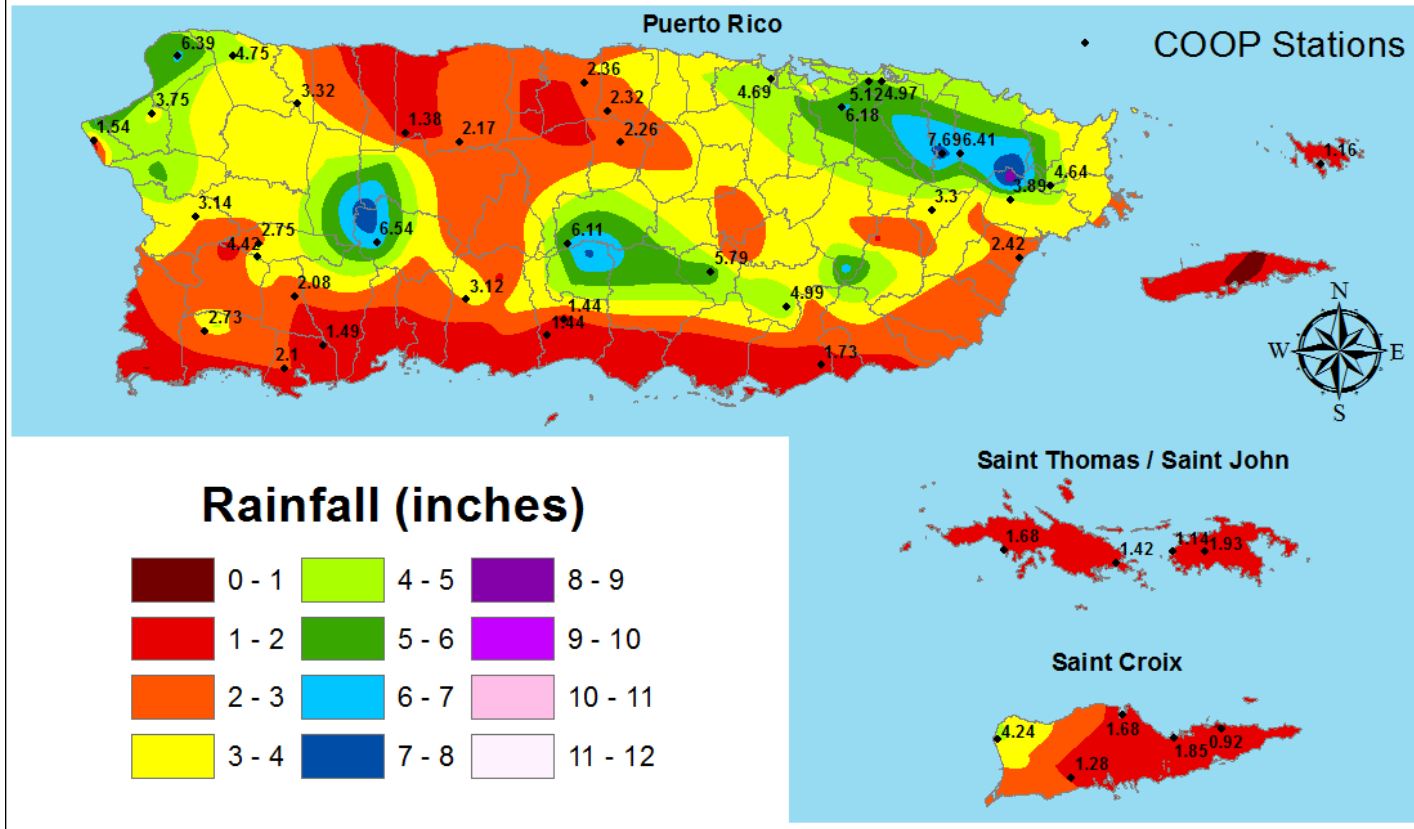


Click on image to enlarge



2015 January Observed Rainfall

Data Source: COOP, RAWS, CoCoRaHS
National Weather Service WFO San Juan
Data is Preliminary



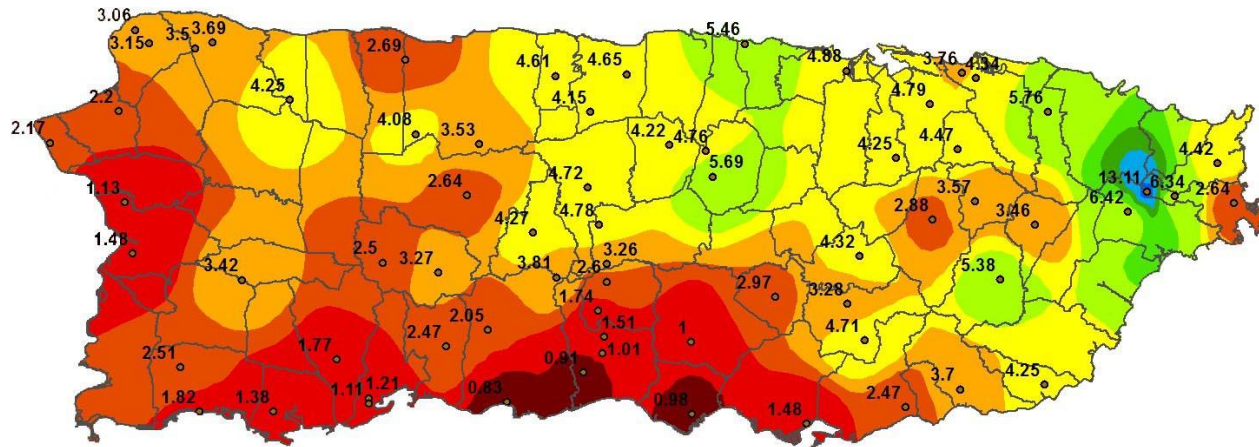
http://www.srh.noaa.gov/sju/?n=pr_usvi_normals



January Normal Rainfall 1981 - 2010



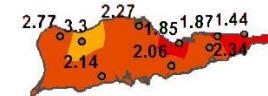
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Monthly Rainfall (Inches)



ST. THOMAS / ST. JOHN



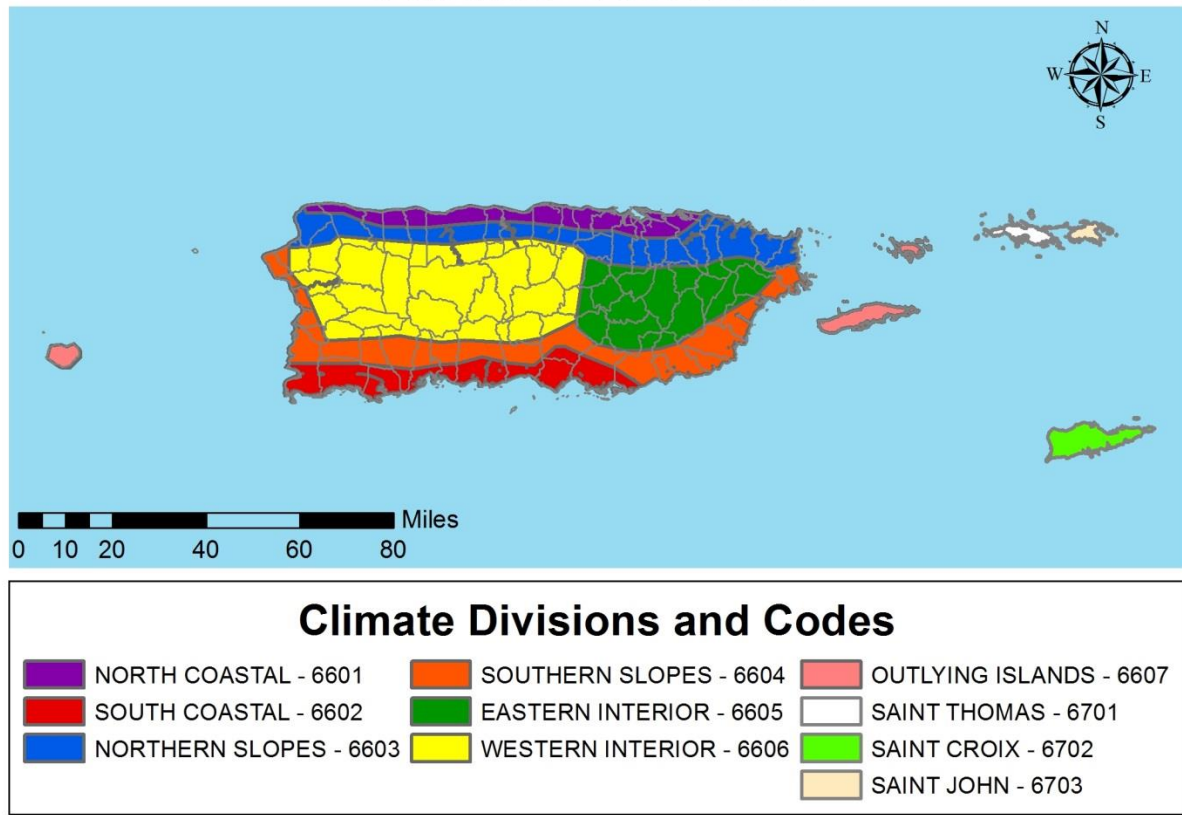
ST. CROIX





2015 Average Rainfall Accumulation per Climate Zones

Puerto Rico and U.S. Virgin Islands Climate Divisions



2015 Average Rainfall Accumulation per Climate Zones

North Coastal	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.98	---	---	---	---	---	---	---	---	---	---	---
NORMAL	4.06	---	---	---	---	---	---	---	---	---	---	---
%PON PER MONTH	98	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATED	3.98	---	---	---	---	---	---	---	---	---	---	---
NORMAL	4.06	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATION	4.06	---	---	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	98	---	---	---	---	---	---	---	---	---	---	---

South Coastal	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	1.92	---	---	---	---	---	---	---	---	---	---	---
NORMAL	1.62	---	---	---	---	---	---	---	---	---	---	---
%PON PER MONTH	119	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATED	1.92	---	---	---	---	---	---	---	---	---	---	---
NORMAL	1.62	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATION	1.62	---	---	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	119	---	---	---	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Northern Slopes	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	4.32	---	---	---	---	---	---	---	---	---	---	---
NORMAL	4.20	---	---	---	---	---	---	---	---	---	---	---
%PON PER MONTH	103	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATED	4.32	---	---	---	---	---	---	---	---	---	---	---
NORMAL	4.20	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATION	4.20	---	---	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	103	---	---	---	---	---	---	---	---	---	---	---

Southern Slopes	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	2.39	---	---	---	---	---	---	---	---	---	---	---
NORMAL	2.00	---	---	---	---	---	---	---	---	---	---	---
%PON PER MONTH	120	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATED	2.39	---	---	---	---	---	---	---	---	---	---	---
NORMAL	2.00	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATION	2.00	---	---	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	120	---	---	---	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Eastern Interior	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	4.34	---	---	---	---	---	---	---	---	---	---	---
NORMAL	4.69	---	---	---	---	---	---	---	---	---	---	---
%PON PER MONTH	93	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATED	4.34	---	---	---	---	---	---	---	---	---	---	---
NORMAL	4.69	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATION	4.69	---	---	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	93	---	---	---	---	---	---	---	---	---	---	---

Western Interior	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.60	---	---	---	---	---	---	---	---	---	---	---
NORMAL	3.90	---	---	---	---	---	---	---	---	---	---	---
%PON PER MONTH	92	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATED	3.60	---	---	---	---	---	---	---	---	---	---	---
NORMAL	3.90	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATION	3.90	---	---	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	92	---	---	---	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Mainland PR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	3.45	---	---	---	---	---	---	---	---	---	---	---
NORMAL	3.41	---	---	---	---	---	---	---	---	---	---	---
%PON PER MONTH	101	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATED	3.45	---	---	---	---	---	---	---	---	---	---	---
NORMAL												
ACCUMULATION	3.41	---	---	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	101	---	---	---	---	---	---	---	---	---	---	---

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2015 Average Rainfall Accumulation per Climate Zones

Saint Thomas/Saint John	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	1.46	---	---	---	---	---	---	---	---	---	---	---
NORMAL	2.72	---	---	---	---	---	---	---	---	---	---	---
%PON PER MONTH	54	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATED	1.46	---	---	---	---	---	---	---	---	---	---	---
NORMAL	2.72	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATION	2.72	---	---	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	54	---	---	---	---	---	---	---	---	---	---	---

Saint Croix	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
OBSERVED	2.17	---	---	---	---	---	---	---	---	---	---	---
NORMAL	2.00	---	---	---	---	---	---	---	---	---	---	---
%PON PER MONTH	109	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATED	2.17	---	---	---	---	---	---	---	---	---	---	---
NORMAL	2.00	---	---	---	---	---	---	---	---	---	---	---
ACCUMULATION	2.00	---	---	---	---	---	---	---	---	---	---	---
% PON ACCUMULATED	109	---	---	---	---	---	---	---	---	---	---	---

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January 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

Islandwide

Year	Inches
Jan-92	7.70
Jan-05	6.51
Jan-97	6.29
Jan-96	5.86
Jan-63	5.21

Year	Inches
Jan-83	1.30
Jan-85	1.30
Jan-76	1.51
Jan-11	1.54
Jan-80	1.56

Mean Rainfall:
4.81 inches

**Total rainfall
accumulation:**
3.45 inches

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January 2015 in Perspective

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Top 5 **Wettest**

Top 5 **Driest**

San Juan Metro Area

Year	Inches
1937	15.47
1902	12.45
2010	11.07
1934	8.09
1943	8.07

Year	Inches
1978	0.61
1983	0.69
1960	0.94
1918	1.26
1979	1.29

Mean Rainfall:
3.76 inches

**Total rainfall
accumulation:**
4.96 inches

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Top 5 **Wettest**

Top 5 **Driest**

Cyril E. King Airport St Thomas

Year	Inches
2006	4.83
1995	4.67
1956	4.19
2005	4.08
2008	3.97

Year	Inches
2013	0.48
2007	0.76
1991	0.82
1976	0.87
1955	0.94

Mean Rainfall:
2.38 inches

**Total rainfall
accumulation:**
1.68 inches

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Top 5 **Wettest**

Henry E. Rohlsen Airport St Croix

Year	Inches
1963	7.35
2005	5.26
1952	4.77
1999	3.74
1964	3.42

Top 5 **Driest**

Year	Inches
2011	0.49
1977	0.54
2009	0.60
1960	0.63
1980	0.65

Mean Rainfall:
2.14 inches

Total rainfall
accumulation:
1.28 inches

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January 2015 Highlights

Wettest Days

Station	Inches	Date
MORA CAMP	2.60	1/11/2015
JAJOME ALTO	2.48	1/13/2015
RIO PIEDRAS EXP STN	2.35	1/23/2015
CALERO CAMP	2.29	1/16/2015
AIBONITO	2.15	1/18/2015

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January 2015 Highlights for Primary Climatological Data Sites

Wettest Days

San Juan Metro Area

Inches	Date
0.70	1/24/2015
0.66	1/22/2015
0.57	1/17/2015
0.53	1/30/2015
0.49	1/10/2015

Cyril E. King AP/St Thomas

Inches	Date
0.44	1/18/2015
0.35	1/12/2015
0.26	1/23/2015
0.17	1/13/2015
0.15	1/5/2015

Henry E. Rohlsen AP/St. Croix

Inches	Date
0.36	1/31/2015
0.19	1/4/2015
0.14	1/25/2015
0.12	1/14/2015
0.11	1/13/2015

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Data retrieved from COOP stations and primary climatological data sites

TEMPERATURE

Islandwide climate record period: 1940 to 2015

San Juan Metro Area climate record period: 1898 to 2015 (Primary climatological site)

Cyril E. King Airport/St Thomas climate record period: 1953 to 2015 (Primary climatological site)

Henry E. Rohlsen Airport/St Croix climate record period: 1951 to 2015 (Primary climatological site)

Following WMO criteria: annual data - Less than 10% of missing values

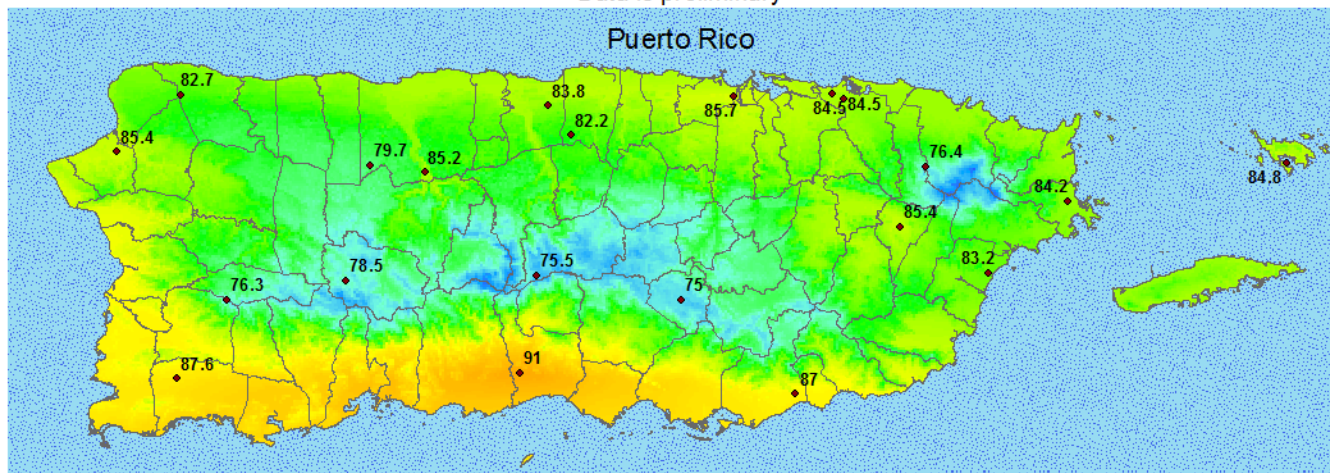




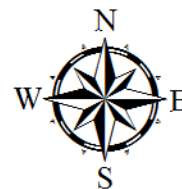
2015 January Mean Maximum Temperatures

National Weather Service WFO San Juan

Data is preliminary



0 5 10 20 30 40 Miles



Temperature Range °F

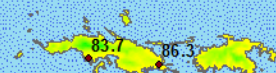


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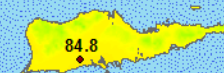
80

Low : 60

Saint Thomas / Saint John



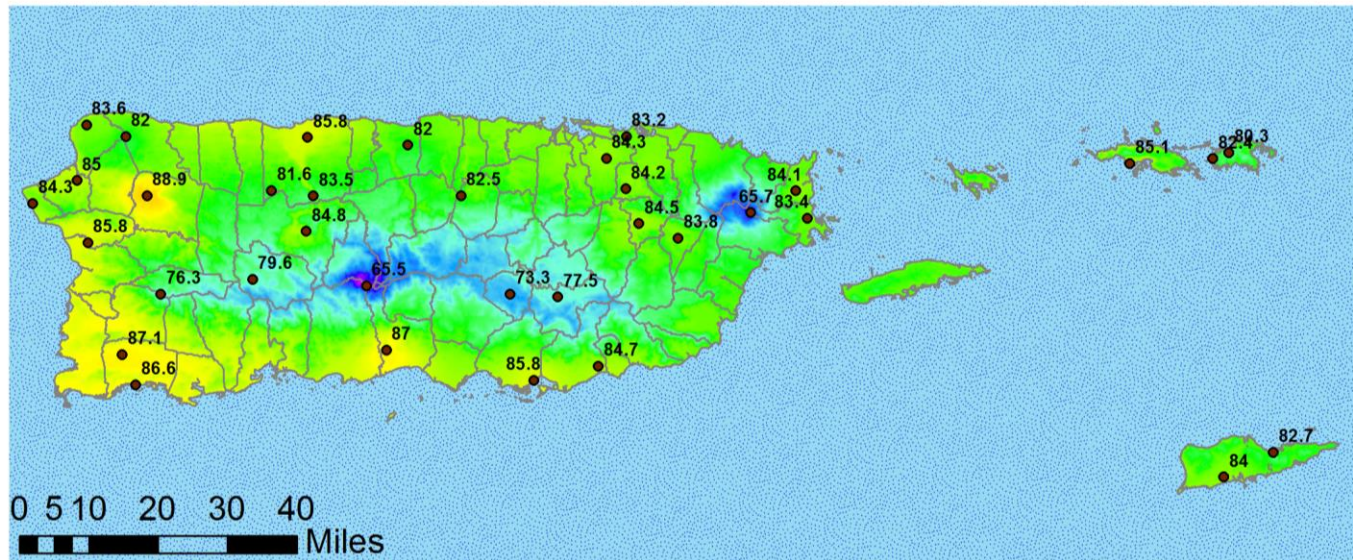
Saint Croix





January Normal Maximum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



High : 100

80

Low : 60

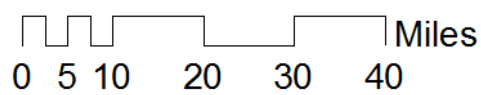
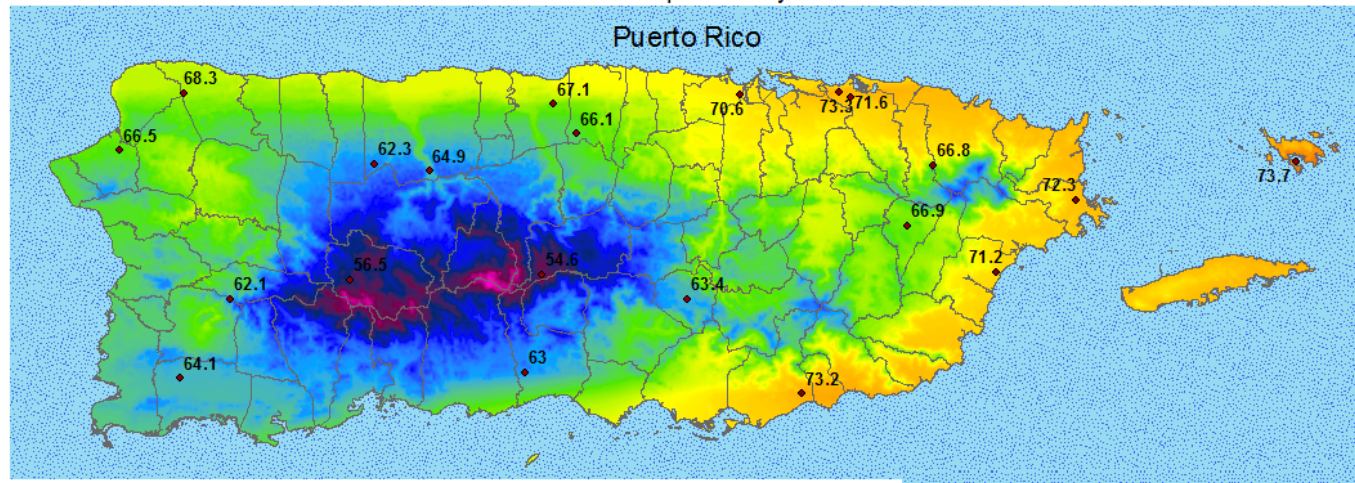




2015 January Mean Minimum Temperatures

National Weather Service WFO San Juan

Data is preliminary



Temperature Range °F



High : 80

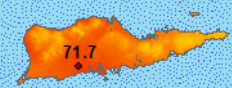
65

Low : 50

Saint Thomas / Saint John



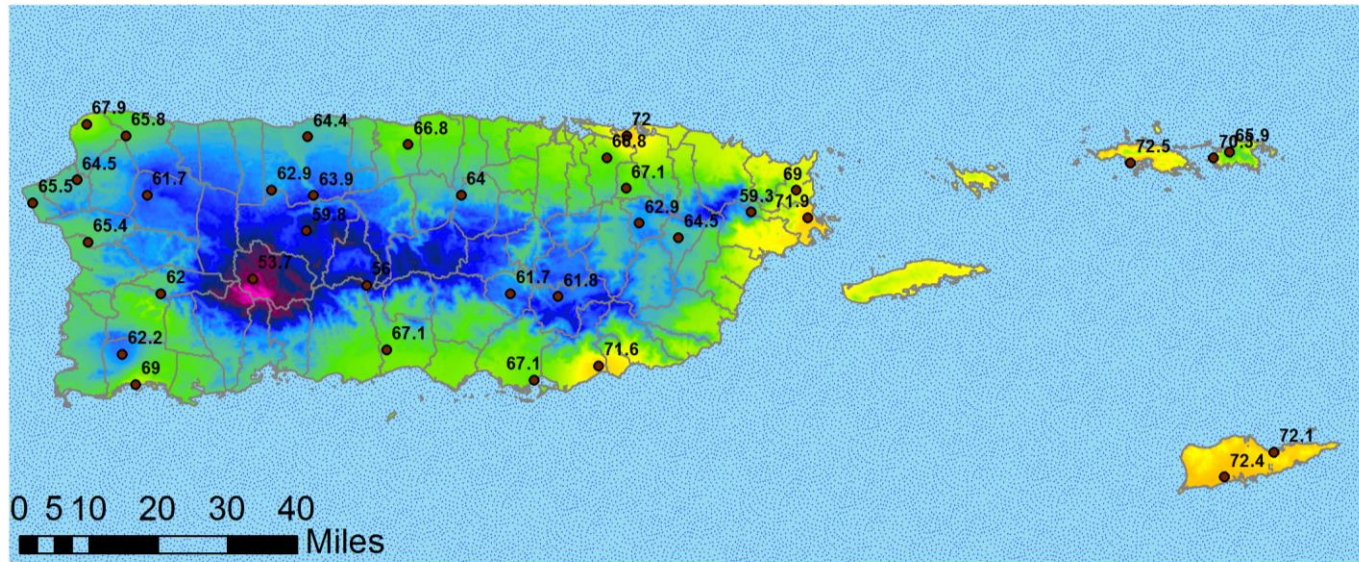
Saint Croix





January Normal Minimum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



High : 80

65

Low : 50



January 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Top 5 Coolest

Islandwide

Year	°F
Jan-48	75.6
Jan-02	74.8
Jan-10	74.8
Jan-98	74.7
Jan-47	74.7

Year	°F
Jan-41	66.2
Jan-43	70.6
Jan-00	71.2
Jan-76	71.4
Jan-42	71.8

Mean Temperature:
73.4 °F

**Jan 2015 mean
temperature 74.5 °F**

**Jan 2015 ended as
the 8th warmest
January on record.**

Following Januarys are not included because do not WMO meet criteria, 40,56,57,58,59,60,67,69,73,74,80,81,82,88,07.



January 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Top 5 Coolest

San Juan Metro Area

Year	°F
2014	80.2
1981	79.8
2015	78.9
1973	78.9
1998	78.7

Year	°F
1950	73.3
1917	73.4
1907	73.4
1945	73.6
1923	73.7

Mean
Temperature:
77.6°F

Jan 2015 ended
as the 3rd warmest
January on record.



January 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Top 5 Coolest

Cyril E. King Airport St Thomas

Year	°F
1994	80.8
1995	80.2
1993	80.1
1996	79.9
2007	79.6

Year	°F
1955	75.0
2012	75.5
1956	76.0
1953	76.5
1954	76.6

Mean
Temperature:
78.8°F

Jan 2015 Mean
Temperature:
78.2°F



January 2015 in Perspective: Mean Avg. Temperature

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Top 5 Warmest

Henry E. Rohlsen Airport St Croix

Year	°F
1973	80.6
1994	80.0
1999	79.7
1998	79.7
1988	79.7

Top 5 Coolest

Year	°F
2012	73.4
1979	75.2
1955	75.5
1965	75.7
1956	75.9

Mean
Temperature:
78.2°F

Jan 2015 Mean
Temperature:
78.3°F



January 2015 Highlights

Highest **Maximum** Temps

Station	Value (°F)	Date
RIO PIEDRAS EXP STN	91	1/28/2015
LAJAS SUBSTATION	89	1/19/2015
TOA BAJA LEVITOWN	89	1/28/2015
GUAYAMA 2 E	89	1/14/2015
SAN JUAN L M MARIN AP	89	1/28/2015

Lowest **Minimum** Temps

Station	Value (°F)	Date
ADJUNTAS SUBSTN	52	1/7/2015
TORO NEGRO FOREST	52	1/26/2015
PONCE 4 E	56	1/20/2015
MARICAO 2 SSW	60	1/20/2015
LAJAS SUBSTATION	60	1/7/2015



2015 Highlights for Primary Climatological Data Sites

Winter

	Dec (2014)	Jan	Feb	Season (data til 01/31, therefore currently ranks as)
San Juan	---	3 rd warmest	---	4 th warmest
Saint Thomas	---	---	---	13 th driest
Saint Croix	8 th Wettest	14 th driest	---	---

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LOOKING AHEAD TOWARD FEBRUARY



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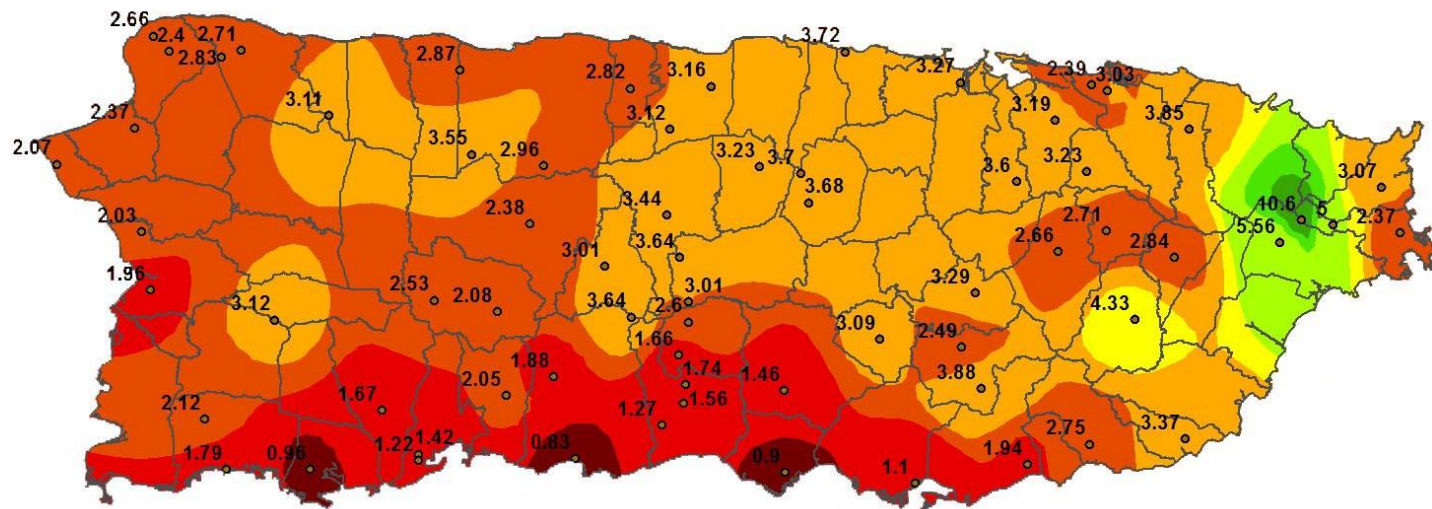




February Normal Rainfall 1981 - 2010



PUERTO RICO



Monthly Rainfall (Inches)



ST. THOMAS / ST. JOHN



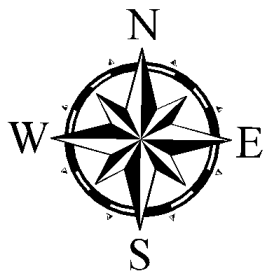
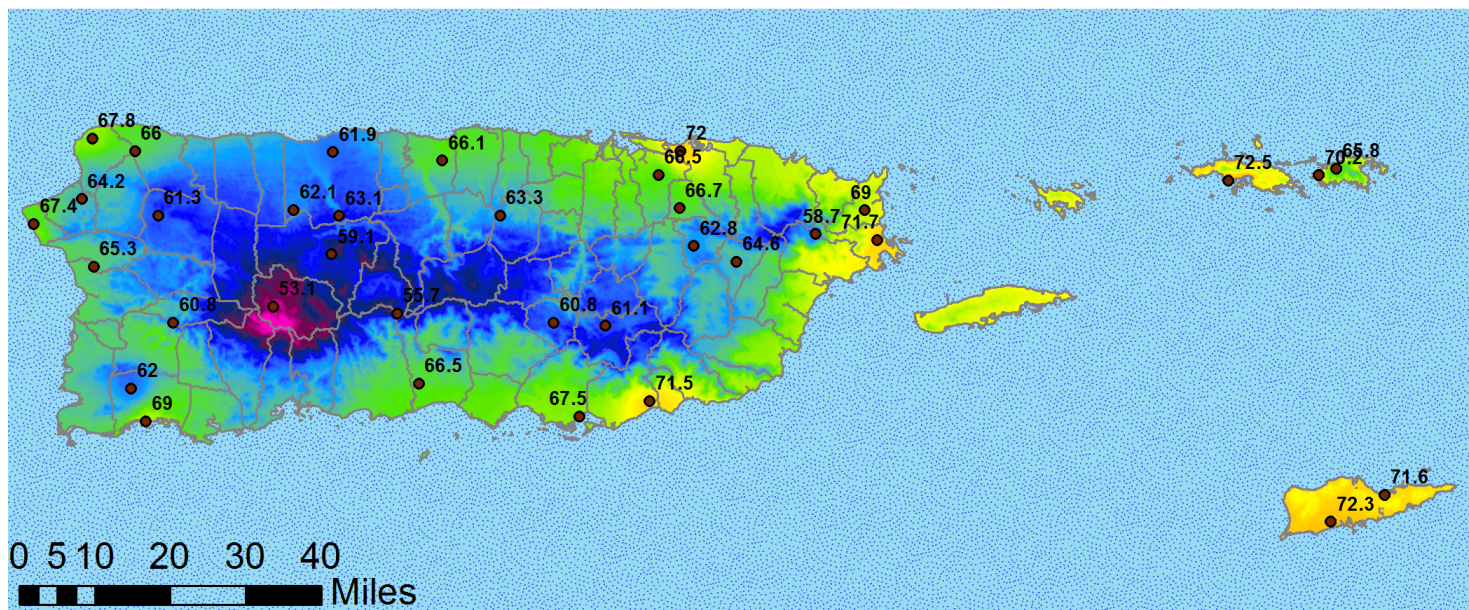
ST. CROIX





February Normal Minimum Temperatures 1981-2010

National Weather Service WFO San Juan



Temperature Range °F



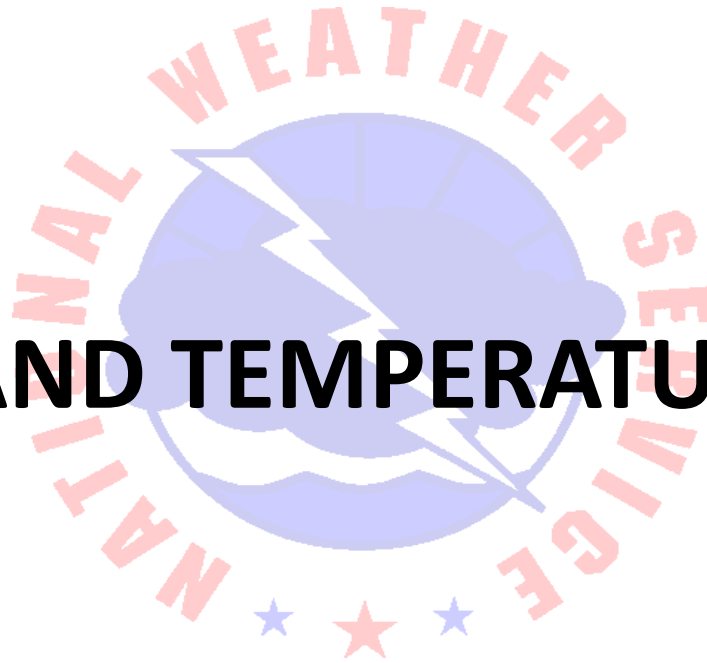
High : 80

65

Low : 50



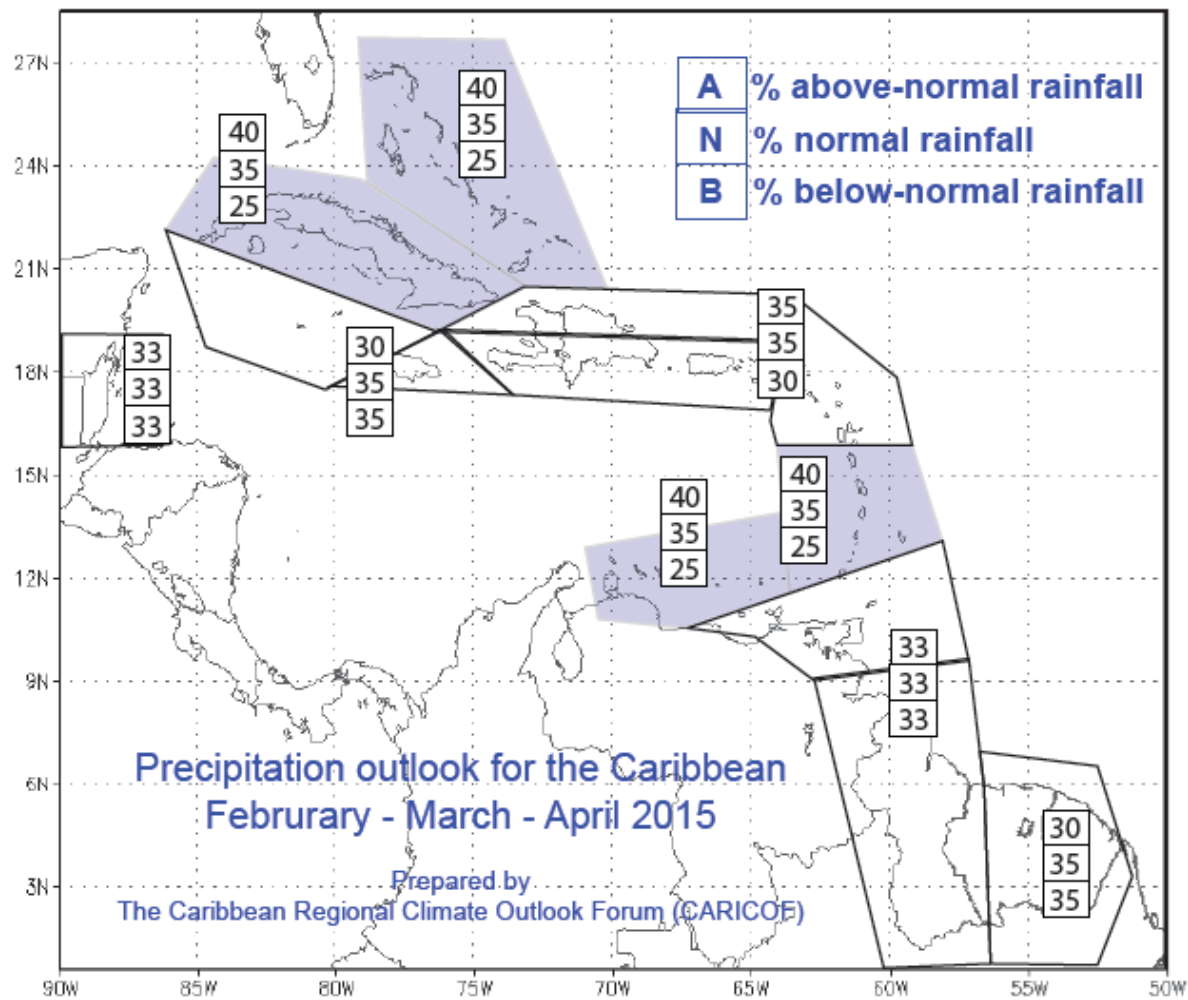
RAINFALL AND TEMPERATURE OUTLOOK



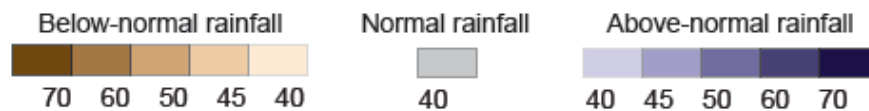
WFO

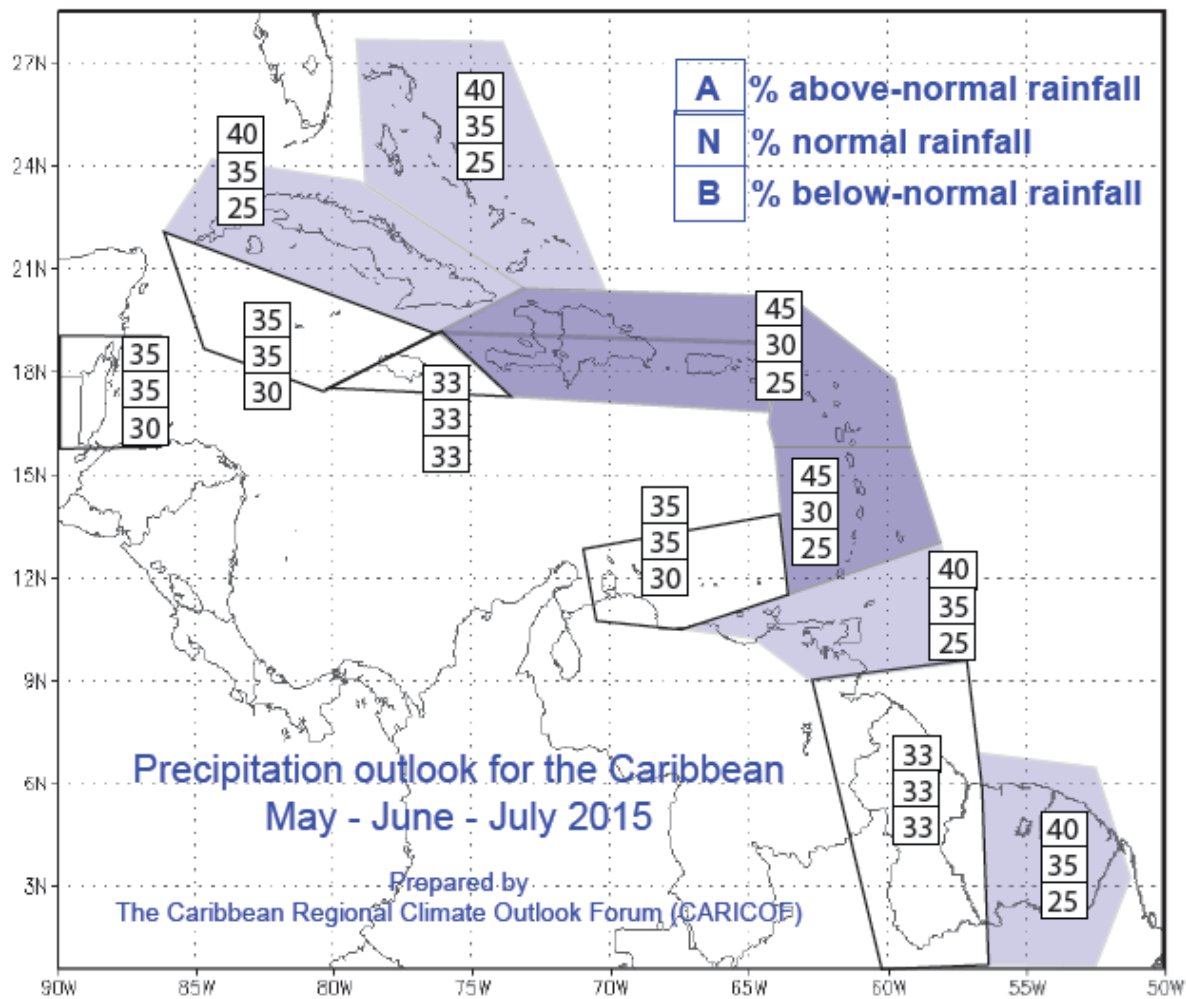
SAN JUAN

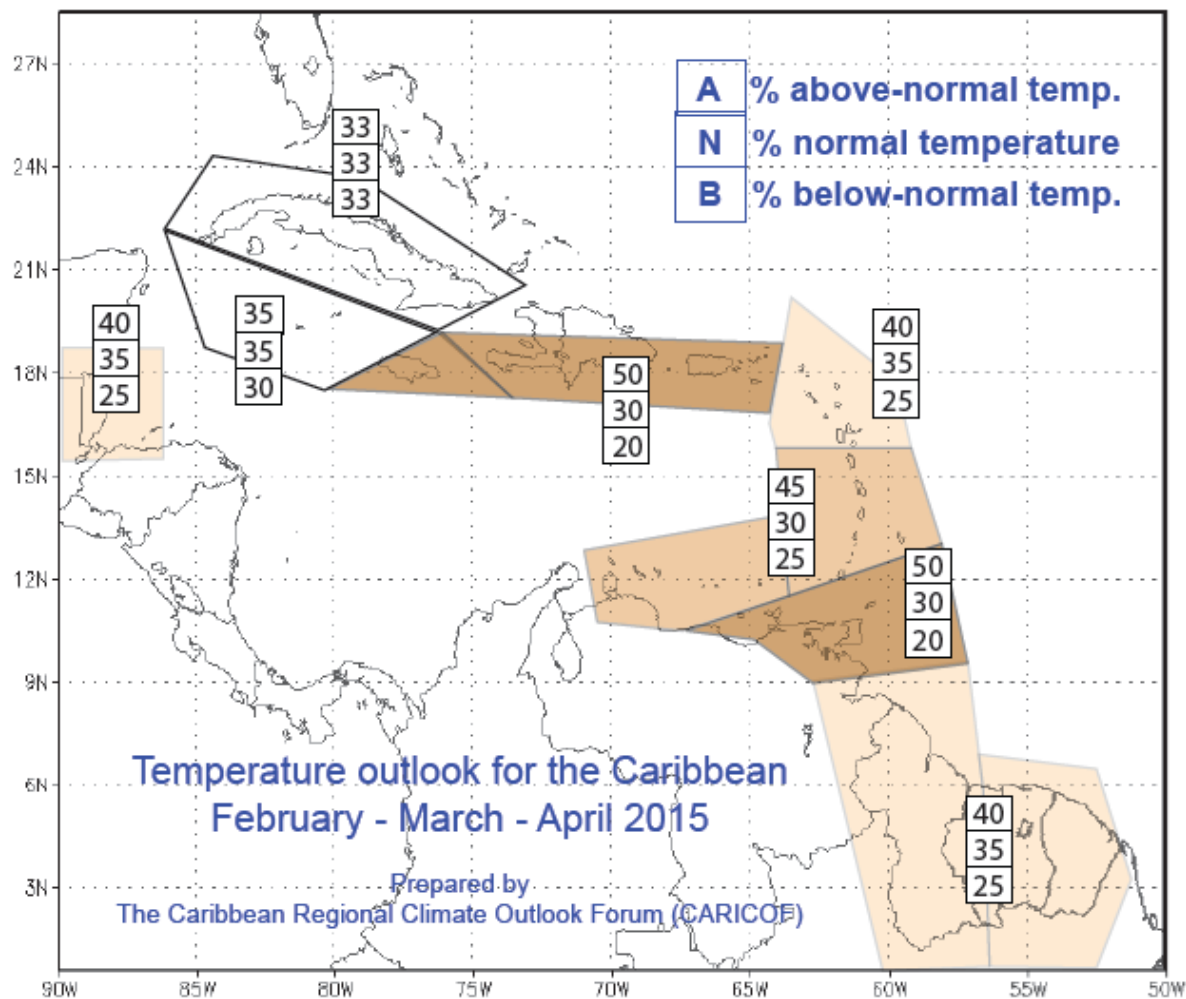


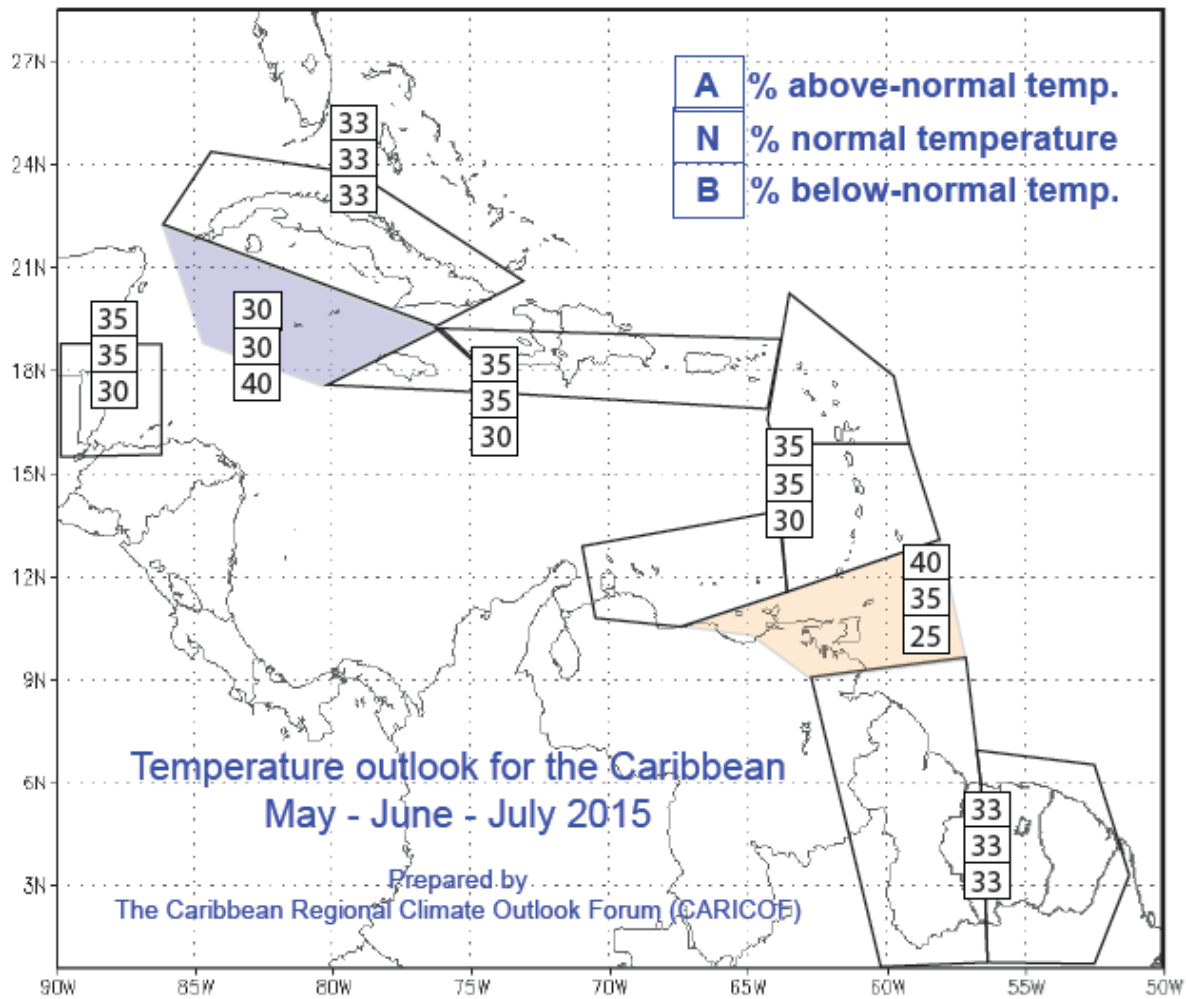


Probability (%) of Most Likely Category









Probability (%) of Most Likely Category

